EDITOR'S TABLE.

—THE evolutionary doctrine leads us to expect that definitions of natural divisions as genera, families, orders, etc., will be ultimately rendered inapplicable through the discovery of intermediate forms. This result has, to some extent, followed paleontologic discovery. The abolition of definitions, however, can never be complete, and many will remain in accordance with the doctrine of "expression points." Evolution of characters, while gradual at bottom, ceases to be so in expression, when two or more stimuli coincide to produce something more than the arithmetical sum of the two might lead one to expect. Moreover, there are many "expressions" which only become apparent at a definite stage of development. The eruption of a tooth, for instance, is only accomplished when the line of the alveolar border is passed by the base of the crown as it rises. Yet the growth was, perhaps, uniform throughout. Especially has the "law of release" of energy probably often operated to render the immediate appearance of a structure possible, although the approach to the point of release may have been uniform and gradual. These facts are opposed to the view that systematic divisions are phylogenetic lines. The former run transverse to the latter, and are generally polyphyletic.

These remarks are apropos to the frequent carelessness exhibited by some modern writers in the use of systematic terms, family subfamily, ordinal names, etc., who use without reference to their relation to the divisions which have long borne, and must necessarily bear, those names. New names are used for divisions already named, or so nearly covered by old names that the creation of new ones is inexcusable. In the hands of some authors, almost every conspicuous genus becomes the type of a new family. Such authors are frequently at no pains to define the divisions thus proposed. The chief sinners in this direction appear to be the paleontologists and embryologists, who are sometimes unfamiliar with systematic biology. In the midst of this carelessness, it is pleasant to refer to the Catalogues of the British Museum issued of recent years. So far as regards the Vertebrata, while we cannot praise their treatment of the North American species, in their systematic work there is conservatism and conscientiousness, which is worthy of imitation everywhere.—C.

—THERE is still a lack of appreciation on the part of the benefactors of their fellow citizens of the importance of original research.

Although many facts of detail are known, few general laws are fully established, and fewer are fully understood. Before we shall grasp the laws of nature, much research will be necessary. The unexpected character of some modern discoveries furnishes ample evidence that research is the only key to knowledge, and that until our hypotheses have the support of abundant facts we must not value them too highly. An illustration of the failure of speculation to anticipate discovery, is the knowledge that various growth functions are carried on by free and wandering cells, who act as carriers of substances to and from tissues. Research in all directions in fact, meets with such reward that it should be sustained by all persons who desire to encourage the progress of knowledge. But the rich men of our country do not discriminate between this function or that of teaching. They found Universities with praiseworthy and princely liberality, but research has to struggle with poverty of means and deficiency of time. Great libraries are founded, but the work in the laboratory from which issue the books which create libraries, receives comparatively little substantial encouragement. It is also the fact that the general public does not discriminate between the distributor and the producer of knowledge The compiler is often mistaken for the discoverer. The education offered in our Universities will correct this in many minds, and then later other facts will have to be understood. This is, that the mental peculiarity which belongs to the discoverer, is not a general one. Every naturalist of long experience will recall the numbers of men who have entered this field to leave it. Men who take a course in a foreign University and write an original thesis for a degree, frequently never make another contribution to science. These are not the men to endow as original investigators. The combination of good sense-perception with memory and systematic skill, along with perseverance and the comprehension of ways and means, with an idealism which justifies the end in view, is not very common ; and presumably, when present, is often suppressed by adverse circumstances of life. Initiative and discovery are the condition of progress, and no better service could be rendered to humanity than the creation of opportunities for their activity.

One of the principal fields of future discovery is the Antarctic continent. No one has approached nearer to the South Pole than 65° S. so that the unexplored region is at its narrowest point greater in width than the continent of North America. While the possibilities of botanical and zoological discovery in such a region, under the rigorous

climatic conditions that prevail there, is less than on any equal area of the earth's surface, they must be nevertheless considerable. But the immense additions which will accrue to geology and the climatic history of the earth in past ages cannot be overestimated, and the probability of important additions to our knowledge of ancient life is great. It is to be hoped that the projects now on foot in this country and elsewhere for Antarctic exploration will be sustained in such a way as to insure their success. An Antarctic expedition should be furnished with every facility for collecting on land and sea, including apparatus for deep sea dredging.

In his account of the Cold Spring Harbor Laboratory, published in the last number of the NATURALIST, Professor Conn seems to mistake the field and purpose of the Marine Biological Laboratory at Wood's Holl. From the first, instruction has been encouraged as much as investigation, and in any year the number of students receiving instruction will far exceed those carrying on independent research. The Marine Biological Laboratory is for the diffusion as well as for the increase of knowledge, and the fact that it trains many of those who come to it for elementary instruction, to become, eventually, investigators, does not in the least invalidate its claim to be considered an institution for instruction.

In the editorial columns of the *Philadelphia Evening Bulletin*, of March 21st, appeared a quotation of remarks made by the Secretary of the Academy of Natural Sciences with reference to the Peary Relief Expedition. These remarks are to the effect that the Academy will not subscribe to the expedition which is to start shortly to bring Lieutenant Peary back from the Arctic regions; and the reason given is that the results obtained by the Peary Expeditions are not of sufficient scientific importance to warrant the Academy in making the subscription. As this is the second time within the last few months that persons in authority in that institution have expressed such sentiments regarding the Peary Expeditions, there is probably some truth in the statement that the Academy will not subscribe to this enterprise. It is to be hoped, however, that the real reason for this action is financial inability, rather than that which has been given by these self-constituted mouthpieces of the Academy. It should not be necessary to repeat, at this day the importance of such expeditions to science. There is no doubt that if the Academy can stand this kind of talk, Lieutenant Peary can-